

ABSTRACT OF THE DISCLOSURE

At a Power-On time, a read potential is generated by a VBP generating circuit (Power-On). The read potential is applied as VBP to a program element to 5 check the state of the program element. The read potential is produced from, e.g. a logic power supply potential. At a program time, a program potential is generated by a VBP generating circuit (Program). The program potential is supplied, for example, from the 10 outside of the chip. The program potential is applied as VBP to the program element. While the read/program potential is being output, the gate of a barrier transistor is supplied with VBT, e.g. a power supply potential.